

NOV 7 2015



12975 W. 24th Pl.
Golden, (Applewood) Colorado, 80401
(303) 237-8865
Fax 237-8869

November 4, 2015

Ms. Wendy Cheung
U. S. Environmental Protection Agency
Mail Code: 8P-W-GW
1595 Wynkoop Street
Denver, CO 80202-1129

RE: Class I Injection Well DI-2 Application to Construct Well
EPA UIC Area Permit CO12143-00000

Dear Ms. Cheung:

As we discussed, the East Cherry Creek Valley Water and Sanitation District would like to construct Well DI-2, which will be a Class I Non-Hazardous injection well under EPA UIC Area Permit CO12143-00000. Well DI-1 has already been constructed and is functioning well.

Attached please find the signed "Underground Injection Control Permit Application", Proposed DI-2 Well Design, and required Financial Responsibility information.

As required, we have researched records from the Colorado Division of Water Resources and the Colorado Oil and Gas Conservation Commission in order to locate any new water or oil/gas wells in the Area of Review that have been constructed since the original well search was conducted in 2009. The Area of Review includes the hatched area on the attached map (ECCV Site) plus the area within one quarter mile of said site boundaries. No new water or oil/gas wells have been constructed in the Area of Review since 1-23-09.

We look forward to your approval to proceed with construction of this well.

If you have questions, please call.

Sincerely,

Patrick OBrien, PE, CPGS



United States Environmental Protection Agency

Underground Injection Control Permit Application

(Collected under the authority of the Safe Drinking Water Act. Sections 1421, 1422, 40 CFR 144)

I. EPA ID Number

T/A

C

U

Read Attached Instructions Before Starting
For Official Use Only

Application approved mo day year	Date received mo day year	Permit Number	Well ID	FINDS Number
	11 11 2015	CO12143-0840	ECCV DI-2	

II. Owner Name and Address

Owner Name East Cherry Creek Valley Water and Sanitation District			
Street Address 6201 S. Gun Club Road		Phone Number (303) 693-3800	
City Aurora	State CO	ZIP CODE 80016	

III. Operator Name and Address

Owner Name East Cherry Creek Valley Water and Sanitation District			
Street Address 6201 S. Gun Club Road		Phone Number (303) 693-3800	
City Aurora	State CO	ZIP CODE 80016	

IV. Commercial Facility

☒ Yes
☐ No

V. Ownership

☒ Private
☐ Federal
☐ Other

VI. Legal Contact

☒ Owner
☐ Operator

VII. SIC Codes

9999

VIII. Well Status (Mark "x")

☐ A.

Operating

 Date Started
 mo day year

☐ B.

Modification/Conversion

☒ C.

Proposed

IX. Type of Permit Requested (Mark "x" and specify if required)

☐ A.

Individual

☒ B.

Area

Number of Existing Wells

1

Number of Proposed Wells

3

Name(s) of field(s) or project(s)

Beebe

X. Class and Type of Well (see reverse)

A. Class(es) (enter code(s))	B. Type(s) (enter code(s))	C. If class is "other" or type is code 'x,' explain	D. Number of wells per type (if area permit)
I	M		3

XI. Location of Well(s) or Approximate Center of Field or Project

Latitude			Longitude			Township and Range								
Deg	Min	Sec	Deg	Min	Sec	Sec	Twp	Range	1/4 Sec	Feet From	Line	Feet From	Line	
						1	1S	66W	SW	1700	S	2200	W	

XII. Indian Lands (Mark 'x')

☐ Yes
☒ No

XIII. Attachments

(Complete the following questions on a separate sheet(s) and number accordingly; see instructions)

For Classes I, II, III, (and other classes) complete and submit on a separate sheet(s) Attachments A--U (pp 2-6) as appropriate. Attach maps where required. List attachments by letter which are applicable and are included with your application.

XIV. Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)

A. Name and Title (Type or Print)

David Kaunisto, District Manager

B. Phone No. (Area Code and No.)

(303) 693-3800

C. Signature

D. Date Signed

11/04/2015

Proposed ECCV DI-2 Injection Well Schematic

Well:	DI-2	Section:	1	Contractor:	TBD	GL:	5030' (est)					
State:	Colorado	Township:	1S	Rig #:	TBD	RKB:	5045' (est)					
County:	Adams	Range:	66W	Well Type:	Vert Disp	TD MD/TVD ft:	10,300'/10,300' (est)					
API #:	TBD			A/E #:	TBD	Date:	31-Oct-15 Rev:					
Geologic Formation Name	Top (ft)	Proposed Perforate	Wellbore Schematic	Hole	Depth	Bit	Casing	Drilling Fluids*	Cement	Dirxnl	Wireline Logging	Sample Logging
TOC @ Surface Fox Hills (USDW) Base Fresh H2O	970 1730		<p>Casing Strings: 10 3/4" x 7 5/8" x 5 1/2" (see wellhead equip specs)</p>	Surface Hole 14 3/4"	0' - 1750'	TriCone 14 3/4"	Surface Casing: 10-3/4" 44# J-55 STC; 20 centralizers, 1 guide shoe, 1 float collar, 2 cement baskets	Spud Mud +/- 9.0 ppg	0-1750': Caliper plus excess; 13.5#/gal Class G + 2% CaCl2 Cement to Surface	Survey every 250' and Drop at TD Max deviation 3 degrees, 1.5 degree/100' change max	Open Hole: Resistivity/ GR/SP/Caliper; Cased Hole: CBL/VDL/GR/CCL	60' samples 0' Surface Hole TD
10 3/4" Casing	1750			Main Hole 9 7/8"	1,750' - 10,300'	9 7/8" PDC	7-5/8" 26.4# P110 LTC new casing; 100 centralizers, 1 float shoe, 1 float collar, 2 cement stage tool (7100' & 2400')	Clear Water/Polymer/KCl 1750' to 300' above Niobrara; 8.3 - 9.2 ppg; 26 - 35 FV		OV - Surface plus 20% caliper, approx 1000sx 13.5ppg Class G + additives Cement to Surface	Drxnl Survey every 500', max 6 degrees, 1.5 degree/100' change max	Open Hole: Resistivity/Micro Log/Compensated Neutron/Density/PEF/GR/SP/Caliper; Cased Hole: CBL/VDL/GR/CCL
9 5/8" Main Hole TOC to Surface								Lightly dispersed system KCl Inhibit 200' > Lyons to TD; pretreat for anhydrites, 9.0 - 9.4 ppg; 36 - 40 FV drill, 65 FV log; 8 - 10 CC FL	10,300' - 7100' DV (plus 20% excess over caliper): Approx 275sx 13.5 ppg Class G + additives			
Injection Pack	9100							Polymer/Gel L5ND KCl Inhib 300' > Niobrara to 200' > Lyons; 9.0 - 9.4 ppg; 36 - 40 FV (drilling); 8 - 10 CC FL				
Lyons *	9150	9150-9250										
I. Satahla *	9270	9300-9400										
Wolfcamp *	9525	9550-9650										
Amazon *	9660	9660-9700										
Council Grove *	9700	9700-9750										
Admiral *	9800											
Virgil *	9930											
Missourian *	10,000											
Fountain	10,220											
TD	10,240	10000-10050										

* All systems closed loop

